



Atty. Docket No.: 19065/2022

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of:	Robin A. Robinson, et al.	Examiner:	Not Yet Assigned
Serial No.:	10/617,569		
Filed:	July 11, 2003	Group Art Unit:	1632
Entitled:	Functional Influenza Virus-Like Particles (VLPs)		
		Conf. No.:	5752

**CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8a**

I hereby certify that this correspondence (and any paper or fee referred to as being enclosed) is being deposited with the United States Post Office as First Class Mail on the date indicated below in an envelope addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Andrea MacVarish

Name of Person Mailing Paper

*Andrea MacVarish*

Signature of Person Mailing Paper

**Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450**

**TRANSMITTAL LETTER**

Enclosed for filing in the above-identified patent application, please find the following documents:

1. Information Disclosure Statement;
2. Form PTO-1449;
3. Copies of Cited References; and
4. Return Post Card.

The Commissioner for Patents is hereby authorized to charge any fees to Deposit Account No. 16-0085, Reference 19065/2022. A duplicate of this transmittal letter is enclosed for this purpose.

Respectfully submitted,

Date: April 25, 2005

*RA Loren*  
\_\_\_\_\_  
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Examiner: Not Yet Assigned

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**INFORMATION DISCLOSURE STATEMENT  
UNDER 37 CFR §§ 1.56, 1.97 AND 1.98**

Dear Sir:

In accordance with the duty of disclosure under 37 CFR § 1.56, Applicant submits this Information Disclosure Statement pursuant to 37 CFR §§ 1.97 and 1.98 in the above-identified application, copies of the non-patent literature are in the list.

A listing of the cited documents, as well as, for the Examiner's convenience, copies of all non-patent references are enclosed. This application was filed after June 30, 2003, and copies of U.S. patents and U.S. patent applications are not required and are not enclosed.

Pursuant to CFR § 1.97(b)(3), because this Statement is being submitted before the first Office Action on the merits, no fee is required.

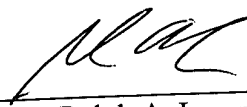
Applicant does not intend to represent that any of the documents submitted herein are material prior art to this invention or that the list represents an exhaustive search of documents related to this invention.

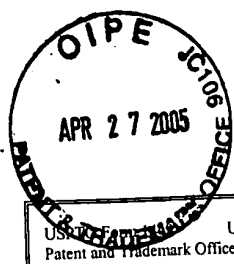
Attorney Docket Number: 19065/2022  
U.S. Serial Number: 10/617,569  
Page 2

Applicant respectfully requests that the documents submitted herein be considered and made of record in this application.

Respectfully submitted,

Date: April 25, 2005

  
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Registration No.: 29,325  
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U.S. Department of Commerce Patent and Trademark Office <b>INFORMATION DISCLOSURE STATEMENT</b>	Attorney Docket No. 19065/2022	Serial No. 10/617,569
	Applicant(s): Robin A. Robinson, et al.	
	Filing Date: July 11, 2003	Group: 1632

**U.S. PATENT DOCUMENTS**

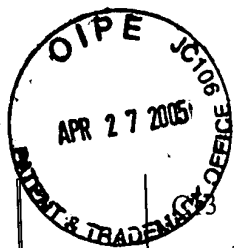
Examiner Initial	Patent No.	Date	Name	Class	Subclass	Filing Date (if appropriate)

**FOREIGN PATENT DOCUMENTS**

Examiner Initial	Document No.	Publication Date	Country	Class	Subclass	Translation	
						YES	NO
	B1	WO 02/00885 A2	01/03/2002	PCT			X

**OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)**

	C1	R.A. Crowther, et al., Three-Dimensional Structure of Hepatitis B. Virus Core Particles Determined by Electron Cryomicroscopy, Cell., Vol. 77, pp. 943-950, June 17, 1994
	C2	Brian R. Murphy and Robert G. Webster, Orthomyxoviruses, Fields Virology, Third Edition, Vol. 1, pp. 1397-1445, 1996
	C3	Xianzehng Zhou, et al., Generation of Cytotoxic and Humoral Immune Responses by Non-replicative Recombinant Semlike Forest Virus, Proc. Natl. Acad. Sci. USA, Vol. 92, pp. 3009-3013, March, 1995
	C4	John J. Treanor, et al, Evaluation of a Recombinant Hemagglutinin Expressed in Insect Cells as an Influenza Vaccine in Young an Elderly Adults, The Journal of Infectious Diseases, Vol. 173, pp. 1467-1470, 1996
	C5	Lahey, et al., Recombinant Baculovirus Influenza A Hemagglutinin Vaccines are Well Tolerated and Immunogenic in Healthy Adults, Concise Communications JID 1996; 174 (October) pp. 838-841
	C6	Bert E. Johansson, Immunization with Influenza A Virus Hemagglutinin and Neuraminidase Produced in Recobinant Baculovirus Results in a Balanced and Broadened Immune Response Superior to Conventional Vaccine, Vaccine 17, pp. 2073-2080 (1999)
	C7	Peter Pushko, et al., Replicon-Helper Systems from Attenuated Venezuelan Equine Encephalitis Virus: Expression of Heterologous Genes <i>in Vitro</i> and Immunization Against Heterologous Pathogens <i>in Vivo</i> , Virology, Vol. 239, pp. 389-401 (1997)
	C8	Jeffrey B. Ulmer, et al, Heterologous Protection Against Influenza by Injection of DNA Encoding a Viral Protein, Science, Vol. 259, 19 March 1993, pp. 1745-1749
	C9	Peter Berglund, et al., Immunization with Recombinant Semlike Forest Virus Induces Protection Against Influenza Challenge in Mice, Vaccine 17 (1999) pp. 497-507
	C10	John C. Cox and Aan R. Coulter, Adjuvants – A Classification and Review of Their Modes of Action, Vaccine, Vol. 15, No. 3, pp. 248-256, 1997
	C11	John Crawford, et al., Baculovirus-Derived Hemagglutinin Vaccines Protect Against Lethal Influenza Infections by Avian H5 and H7 Subtypes, Vaccine 17 (1999), pp. 2265-2274
	C12	Theresa Latham and Jose M. Galarza, Formation of Wild-Type and Chimeric Influenza Virus-Like Particles Following Simultaneous Expression of Only Four Structural Proteins, Journal of Virology, July 2001, pp. 6154-6165



		Tsuji, et al, Recombinant Sindbis Viruses Expressing a Cytotoxic T-Lymphocyte Epitope of a Malaria Parasite or of Influenza Virus Elicit Protection Against the Corresponding Pathogen in Mice, Journal of Virology, Aug. 1998, pp. 6907-6910
	C14	Gabriele Neumann, et al., Plasmid-Driven Formation of Influenza Virus-Like Particles, Journal of Virology, Jan. 2000, pp. 547-551
	C15	J.S.M. Peiris, et al., Co-circulation of Avian H-N2 and Contemporary "Human" H3N2 Influenza A Viruses in Pigs in Southeastern China: Potential for Genetic Reassortment?, Journal of Virology, Oct. 2001, pp. 9679-9686
	C16	Jeffrey B. Ulmer, et al., Protective D4 <sup>+</sup> and CD8 <sup>+</sup> T Cells against Influenza Virus Induced by Vaccination with Nucleoprotein DNA, Journal of Virology, July 1998, pp. 5648-5653
	C17	Tokiko Watanabe, et al., Immunogenicity and Protective Efficacy of Replication-Incompetent Influenza Virus-Like Particles, Journal of Virology, Jan. 2002, pp. 767-773
	C18	Christopher W. Olsen, et al., Immunogenicity and Efficacy of Baculovirus-Expressed and DNA-Based Equine Influenza Virus Hemagglutinin Vaccines in Mice, Vaccine, Vol. 15, NO. 10., pp. 1149-1156, 1997
	C19	Vladimir A. Slepishkin, et al, Protection of Mice Against Influenza A Virus Challenge by Vaccination With Baculovirus-Expressed M2 Protein, Vaccine, Vol. 13, No. 15, pp. 1399-1402, 1995
	C20	Paul Pumpens and Elmars Grens, Artificial Genes for Chimeric Virus-Like Particles, Artificial DNA (Khudyakov, Y.E., and Fields, H.A., Eds.) pp. 249-327. CRC Press, New York (2003)
EXAMINER		DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

\*\*Copies of references not provided at the time of this submission.